

Fact Sheet



For Final Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on December 28, 2006.

Permit Number: **R30-03900102-2006**
Application Received: **November 16, 2009**
Plant Identification Number: **03-54-03900102**
Permittee: **Bayer MaterialScience LLC**
Facility Name: **South Charleston Plant**
Mailing Address: **501 2nd Avenue, South Charleston, WV 25303**

Permit Action Number: *MM02* Revised: *March 11, 2009*

Physical Location:	South Charleston, Kanawha County, West Virginia
UTM Coordinates:	439.65 km Easting • 4247.00 km Northing • Zone 17
Directions:	Traveling on I-64 West from Charleston, take the Montrose Exit (Exit 56) and turn right onto Montrose. Straight ahead is the main plant entrance at the corner of Montrose and MacCorkle Avenue.

Facility Description

The Bayer South Charleston Plant is a chemical manufacturing facility which produces polyether and polymer polyols.

On November 4, 2009, Bayer submitted a combined application for a Class II administrative update (R13-2561F) and Title V minor modification (R30-03900102-2006-MM02). R13-2561F was approved on December 28, 2009. The changes approved under R13-2561F have been incorporated into R30-03900102-2006-MM02.

Emissions Summary

This modification results in the following emission rate increases:

Pollutant	lb/hr	TPY
Acrylonitrile	0.08	0.04
Styrene	0.04	0.04
Vinylidene Chloride	0.04	0.04
VOC	0.04	0.04

Title V Program Applicability Basis

This facility had the potential to emit 13.2 tons per year of styrene, a hazardous air pollutant, plus over 33 tons per year of an aggregate combination of hazardous air pollutants. However, due to the installation of a wastewater stripper permitted by R13-2561C, the facility reduced emissions of HAPs to below major source thresholds. Prior to installation of the wastewater scrubber, the facility became subject to 40 C.F.R. 63, Subpart PPP, pertaining to the polyether polyol MACT. As a result of being subject to 40 C.F.R. 63, Bayer is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR13	Preconstruction permits for minor sources.
	45CSR30	Operating permit requirement.

State Only:	None
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Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2561F	December 28, 2009	None

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under

the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

The Bayer MaterialScience manufacturing facility operates four separate Polymer Polyol (PMPO) units. The process vents as well as storage tanks from the units feed a central thermal oxidizer (CTO). Each of the four PMPO units has an emergency vent that must be utilized when there is a failure of the CTO and/or waste gas header systems. The emergency vents E-651, E-653, E-652/E-654, and E-658 prevent the build up of excess pressure within each processing system. R13-2561F, issued on December 28, 2009, incorporated emission limits for the PMPO emergency jet vents E-651, E-653, E-652/E-654, and E-658; and added requirements to monitor and maintain records of the emergency venting hours for these vents.

In addition to the changes approved under R13-2561F, the 40 C.F.R. 63, Subpart FFFF MON placeholder language previously included as Condition 4.1.10 was removed. R13-2561C established synthetic minor status before the MON's applicable compliance date of May 10, 2008, making this facility no longer subject to the requirements of 40 C.F.R. 63, Subpart FFFF and making the MON placeholder language no longer applicable.

The following table is a summary of the changes included in this Title V minor modification:

Section	Revisions
1.0	<p>The following changes were made to the Section 1.1 Emission Units Table:</p> <p>PMPO 1 – Added emission point E-651 PMPO 2 – Added emission point E-653 PMPO 3 – Added emission points E-652/E-654 PMPO 4 – Added emission point E-658 #1 and #2 Reaction System – Deleted emission points E-600 and E-601; and modified the control device description for emission points E-3101 and E-3201</p> <p>The active permit and its issuance date were updated in Section 1.2.</p>
2.0	No changes.
3.0	No changes.
4.0	<p>4.1.1 – Added emission limits for E-651, E-653, E-652/E-654, and E-658</p> <p>4.1.4 – Clarified that the requirements of 4.1.4 apply during normal operations.</p> <p>4.1.6 – Added condition 4.1.6 for emergency vents E-651, E-653, E-652/E-654, and E-658 and renumbered the subsequent conditions.</p> <p>4.2.2 - Added requirement to monitor the emergency venting hours for E-651, E-653, E-652/E-654, and E-658.</p> <p>4.4.5 – Added requirement to record the emergency venting hours for E-651, E-653, E-652/E-654, and E-658.</p> <p>Deleted previous condition 4.1.10 which no longer applies.</p>
5.0	No changes.
6.0	No changes.
7.0	No changes.
8.0	No changes.
9.0	No changes.
10.0	No changes.

Attachment A	The "Attachment A 45CSR21 and 45CSR27 Source List" was updated to the current version which is attached to R13-2561F.
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Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

40 C.F.R. 63, Subpart FFFF – "National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing." The facility established synthetic minor status via the minor source NSR permit R13-2561C. Since permit R13-2561C established this limitation before the applicable compliance date of May 10, 2008 pertaining to the referenced "MON" standard, Bayer's South Charleston facility is not be subject to this Federal Standard.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: N/A
Ending Date: N/A

All written comments should be addressed to the following individual and office:

Carrie McCumbers
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Carrie McCumbers
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1226 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

No comments were received.